Joint Qualification Board for Test and Evaluation Key Leadership Positions

Computer Based Training
August 2016

DON T&E
Office
DASN
(RDT&E)

KLP Q-Board Training Goals

- Discuss the Joint Qualification Board (Q-Board) for Test and Evaluation (T&E) Key Leadership Positions (KLPs)

- Understand how Q-Boards provide a pool of qualified, pre-screened personnel using a standardized process across the DOD and DON

- Understand how Q-Boards can provide for personnel career development and positive organizational impact

- Desired end goal for participants
  - Understand background and context
  - Understand value in your participation
  - Define follow-on actions

What This Training Covers

- **Background**
  - KLP Q-Boards defined
  - Charge from leadership
  - Chief Developmental Tester (CDT) role
- **Value proposition**
  - Career development
  - Shows expertise
  - Conveys commitment
- **Going forward**
  - Roles and responsibilities
  - Overview of the application process
  - You are in the pool or grandfathered…now what?

Background

Charge From Leadership
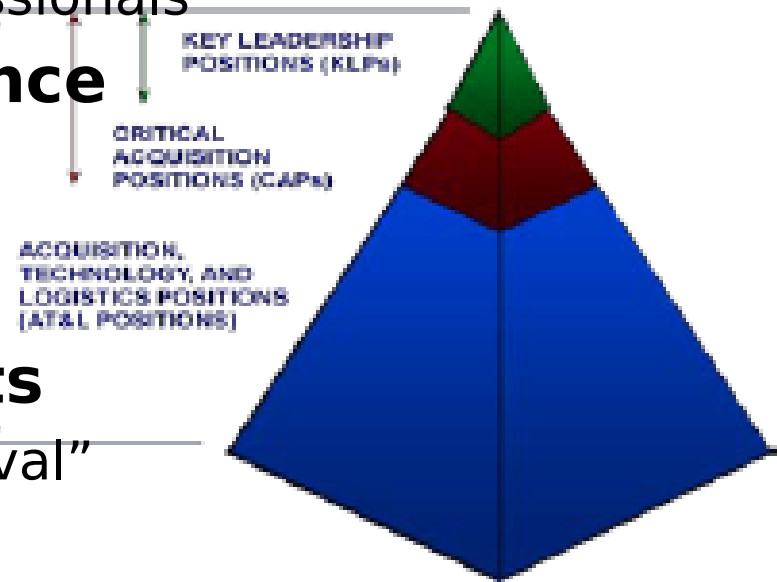
- **Background & Context**
  - OSD ATL Nov 8 2013 Memo: KLP Qualification Criteria
  - DASD DT&E / DON T&E Memo: Call for Nominations
  - Focus on acquisition professionals
- **T&E Q-Board Governance**
  - Chaired by DASD DT&E
  - OSD T&E Functional Lead
  - Services membership
- **KLP Q-Board Highlights**
  - Performs as "seal of approval"
  - Professional credential
  - No change to CDT KLP selection process

KEY LEADERSHIP POSITIONS (KLPs)

CRITICAL ACQUISITION POSITIONS (CAPs)

ACQUISITION, TECHNOLOGY, AND LOGISTICS POSITIONS (AT&L POSITIONS)

Q-Boards will be used to identify a pool of qualified personnel

Chief Developmental Tester (CDT) Role

- Coordinate planning, management and oversight of DT&E activities

- Maintain insight into contractor T&E activities

- Oversee T&E activities of other participating government entities

- Help Program Managers make technically informed, objective judgments about contractor and government T&E planning and test results

Other Duties of a CDT/T&E KLP

- **Roles and Responsibilities:**
  - Chair T&E Working Integrated Product Team (WIPT)
  - Develop T&E strategy
  - Oversee T&E Master Plan (TEMP)
  - Support acquisition documentation
  - Maintain and track T&E Deficiency Report
  - Implement T&E best practices (e.g., Integrated Testing, Modeling & Simulation (M&S), Live Fire T&E Processes, etc.)
  - Coordinate with broad set of T&E stakeholders

- **Qualifications:**
  - KLP Q-Boards is intended to improve standardization of qualifications for these and other KLP positions across Services

"The selection of qualified personnel to fill KLPs is essential for the organization and the individuals filling these highly demanding positions."
Mr. Frank Kendall, OSD (AT&L), KLP and Qualification Criteria Memo 8

Value Proposition

Why KLP Q-Board Process?

- **Career Development**

- **Shows Expertise**

- **Conveys Commitment**

Why KLP Q-Board Process?

Career Development

- Self improvement
- Differentiation among test professionals
- Increased visibility
- Portability

Why KLP Q-Board Process?

Shows Expertise

- Knowledge, Skills, Abilities and Experience
- Reflection of quality level in knowledge and performance
- Shows areas of meeting and exceeding qualification criteria

Why KLP Q-Board Process?

Conveys Commitment

- Currency in T&E Profession
- Dedication to becoming T&E KLP
- Professionalism

DAWIA Certified or KLP Qualified: What's the Difference?

KLP Qualification Validates Certification!

DAWIA T&E Level III

Core:

- Requisite DAU course work for Level I, II and III
- 4 years of T&E experience in support of acquisition

T&E KLP Qualified

Required:

- Relevant Experience
- Acquisition Corps member
- Executive Leadership Training or Experience
- 8 years T&E experience
- Cross function and broadening assignments
- Functional mentor

T&E Level III Certified **+** T&E KLP Qualified **=** *Recognized as T&E SME by OSD & Service T&E Executives!*

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Analogy

Inspected and Certified

Quality

Certified

Choice

Certified or not: It's the buyer's choice, but certification provides quality assurance and mitigates risk

T&E KLP Q-Board Key Events

- DASD (DT&E) call for nominations to Service T&E Executives
- Deputy DON T&E Executive call to Navy and Marine Corps SYSCOM/WC/SCs and others for DON T&E nominations
- Candidates decide to participate, discuss with supervisor for concurrence, and submit completed package to Command/Activity T&E Lead/POC for SES/Flag endorsement
- The individual or Command T&E staff submits the application to Director, Human Capitol Initiatives (HCI) for Joint Qualification Board consideration
- DASD (DT&E) convenes T&E KLP Joint Qualification Board
- T&E KLP Q-Board results reported to OSD (AT&L), HCI and the Services
- HCI provides Q-Board results to applicants along with KLP Qualified certificates to those that have passed the Board.
- The individual, HCI and DON DACM keep record of results.

Q-Board Roles and Responsibilities

Participant	Roles and Responsibilities
OSD Functional Leader (DASD (DT&E))	• Chair Qualification Board • Establish functional specific requirements for qualification • Sign announcement and call for nominations memos
Component Functional Leads (Deputy DON T&E Executive, DACM)	• Member of Qualification Board • Oversee component application process • Distribute Navy and Marine Corps call for nominations • Coordinates with commands/activities
Command/Activity Functional Lead (SES/Flag)	• Sign candidate package at SES/Flag level • Endorse the candidate
Candidate Supervisor	• Collect and review candidate packages • Provide concurrence on the application • Submit candidate application to Command T&E Lead for SES/Flag endorsement
Candidate	• Complete application package in accordance with instruction. Once all signatures obtained, submits application to HCI by deadline

Application

**Section 1.0
KLP Command Cross
Functional
Requirements**

Application - Sections 1.1-1.2

Education/Certification/Training & Currency/Tenure

SECTION 1: KLP COMMON CROSS-FUNCTIONAL REQUIREMENTS

Section 1.1.: Education, Certification, and Training Requirements

Enter information in the appropriate box

		Degree		Field of Study		School	
Education	Bachelor's Degree						
	Relevant Advanced Degree (Preferred)						
	Intermediate / Senior / Executive School Certificate (Preferred)						
DAWIA Certification	DAWIA Certifications in (mark all appropriate career fields and certification level obtained)		Auditing		Business-CE		Business-FM
			Contracting		Engineering		Facilities Engineering
			Industrial Property		Information Technology		Life Cycle Logistics
			PQM		Program Management		Purchasing
			S&TM		Test & Evaluation		

Section 1.2.: Currency and Tenure Requirements

Mark the box to indicate that you meet the following requirements

	I am current or on track to meet currency requirements (80 hours of continuous learning points every 2 years)		I acknowledge the requirement for a tenure agreement. (Those persons selected to fill KLPs must sign a 3-year tenure agreement. Being identified for the KLP Candidate pool does not require a tenure agreement.)

Section 1.1: Education, Certification, and Training Requirements

- **Education -** Minimum of BS Degree in Scientific or Technical Field
- **Certification -** DAWIA T&E Level III and any others

Section 1.2: Currency and Tenure Requirements

- **Currency -** 80 Hours of Continuous Learning Points Every 2 Years
- **Tenure** (Acknowledgement Only) - 3 Year Agreement

Application - Sections 1.3-1.4
Experience Requirements & Prior ID by KLP Q-Board

Section 1.3.: Experience Requirements

Mark the box to indicate that you meet the following requirements			
	I am in a GS-14/GS-15 or O-5/O-6 or higher position		I participated in cross-functional and broadening assignments/rotations
	I served 2 years as a functional mentor (minimum 10 hours per year)		I have 8 years of acquisition experience, or equivalent demonstrated proficiency -- OR -- For ACAT II PM or ACAT I DPM positions, I have 6 years of acquisition experience.

Section 1.4.: Prior Identification as a KLP Candidate

Mark the boxes of any career field Qualification Boards that have already deemed you qualified as a KLP*					
	Business – Cost Estimating		Business – Financial Management		Contracting
	Engineering		Information Technology		Life Cycle Logistics
	Program Management		Production, Quality and Manufacturing		Test and Evaluation

* HCI will validate your qualification prior to acceptance of this application.

Section 1.3: Experience Requirements
- GS-14/15 or O-5/6 or higher position
- Minimum 8 years acquisition experience
- Functional mentor and participated in cross functional broadening assignments

Section 1.4: Prior Identification by a KLP Joint Q-Board
- For candidates who have previously been deemed qualified by another KLP Qualification Board, mark the specific career field box in which qualified

Application - Section 1.5
Executive Leadership

Section 1.5.: Executive Leadership

This section should highlight your <u>Executive Leadership</u> experience across all acquisition career fields addressing some or all of the competencies defined in the *Instructions for Completing a Key Leadership Position Qualification Board Application.*

Enter your work experience/evidence of requirement fulfillment in the box immediately below each requirement.
Responses are limited to 500 characters or fewer per requirement.

Describe your experience in applying <u>Fundamental Leadership Skills</u>.

Provide specific examples of your relevant experience

Describe your experience <u>Leading Change and Leading People</u>.

Describe your experience with taking a <u>Results Driven approach and Building Coalitions</u>.

Provide specific examples of your relevant experience

Describe your <u>Business Acumen and Enterprise-Wide Perspective</u>.

Provide specific examples of your relevant experience

Executive Leadership: Fundamental Leadership Skills, Leading Change/People, Results Drive/Building Coalitions, Business Acumen and Enterprise Approach
- For each grouping, address the elements

Fundamental Leadership Skills

These skills are the foundation for success in any career field

Areas of Competency to Consider

- Interpersonal Skills
- Oral Communication
- Integrity/Honesty

- Written Communication
- Continual Learning

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Factors to Consider in Your Application Response: Fundamental Leadership Skills

Interpersonal Skills	▪ Treats others with courtesy, sensitivity, and respect. ▪ Considers and responds appropriately to the needs and feelings of different people in different situations.
Oral Communication	▪ Makes clear and convincing oral presentations. ▪ Listens effectively; clarifies information as needed.
Integrity/ Honesty	▪ Behaves in an honest, fair, and ethical manner. ▪ Shows consistency in words and actions. Models high standards of ethics.
Written Communication	▪ Writes in a clear, concise, organized, and convincing manner for the intended audience.
Continual Learning	▪ Assesses and recognizes own strengths and weaknesses; pursues self-development.
Public Service Motivation	▪ Shows a commitment to serve the public. ▪ Ensures that actions meet public needs ▪ Aligns organizational objectives and practices with public interests.

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Leading Change/Leading People

Leading Change:

The ability to bring about strategic change, both within and outside the organization, to meet organizational goals. This competency requires the ability to establish an organizational vision and to implement it in a continuously changing environment

Leading People:

The ability to lead people toward meeting the organization's vision, mission, and goals. This competency addresses the ability to provide an inclusive workplace that fosters the development of others, facilitates cooperation and teamwork, and supports constructive resolution of conflicts

Areas of Competency to Consider

- Creativity and Innovation
- External Awareness
- Flexibility
- Resilience
- Strategic Thinking
- Vision
- Conflict Management
- Leveraging Diversity
- Developing Others
- Team Building

Factors to Consider in Your Application Response: Leading Change

Creativity & Innovation	▤Develops new insights into situations. - Questions conventional approaches. ▤Encourages new ideas/innovations. ▤Designs and implements new or cutting edge
External Awareness	▤Understands and keeps up-to-date on local, national, and international policies and trends that affect the organization and shape stakeholders' views. ▤Remains aware of the organization's impact on the external
Flexibility	▤Is open to change and new information. ▤Rapidly adapts to new information, changing conditions, or unexpected obstacles.
Resilience	▤Deals effectively with pressure. ▤Remains optimistic and persistent, even under adversity. ▤Recovers quickly from setbacks.
Strategic Thinking	▤Formulates objectives and priorities. ▤Implements plans consistent with long-term interests of the organization in a global environment. ▤Capitalizes on opportunities and manages risks.
Vision	▤Takes a long-term view and builds a shared vision with others. ▤Acts as a catalyst for organizational change. ▤Influences others to translate vision into action.

Factors to Consider in Your Application Response: Leading People

Conflict Management	Encourages creative tension and differences of opinions. Anticipates and takes steps to prevent counter-productive confrontations. Manages and resolves conflicts and disagreements in a constructive manner.
Leveraging Diversity	Fosters an inclusive workplace where diversity and individual differences are valued and leveraged to achieve the vision and mission of the organization.
Developing Others	Develops the ability of others to perform and contribute to the organization by providing ongoing feedback and by providing opportunities to learn through formal and informal methods.
Team Building	Inspires and fosters team commitment, spirit, pride, and trust. Facilitates cooperation and motivates team members to accomplish group goals.

Results Driven/Building Coalitions

Results Driven:

The ability to meet organizational goals and customer expectations. This competency requires the ability to make decisions that produce high-quality results by applying technical knowledge, analyzing problems, and calculating risks

Building Coalitions:

The ability to build coalitions to achieve goals internally and with:
- Federal agencies
- State and local governments
- Nonprofit and private sector orgs
- Foreign governments international organizations to achieve common goals

Areas of Competency to Consider

- Accountability
- Customer Service
- Decisiveness
- Entrepreneurship
- Problem Solving
- Technical Credibility
- Political Savvy
- Partnering
- Influencing/Negotiation

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Factors to Consider in Your Application Response: Results Driven

Accountability	▣ Holds self and others accountable for measurable high-quality, timely, and cost-effective results. ▣ Determines objectives, sets priorities, and delegates work. ▣ Accepts responsibility for mistakes. ▣ Complies with established control systems and rules.
Customer Service	▣ Anticipates and meets the needs of both internal and external customers. ▣ Delivers high-quality products and services. ▣ Commits to continuous improvement
Decisiveness	▣ Makes well-informed, effective, and timely decisions, even when data are limited or solutions produce unpleasant consequences. ▣ Perceives the impact and implications of decisions.
Entrepreneurship	▣ Positions the organization for future success by identifying new opportunities; builds the organization by developing or improving products or services. ▣ Takes calculated risks to accomplish organizational objectives
Problem Solving	▣ Identifies and analyzes problems. - Makes recommendations. ▣ Weighs relevance and accuracy of information; generates and evaluates alternative solutions
Technical Credibility	▣ Understands and appropriately applies principles, procedures, requirements, regulations, and policies related to specialized expertise.

Factors to Consider in Your Application Response: Building Coalitions

Partnering	Develops networks and builds alliances, collaborates across boundaries to build strategic relationships and achieve common goals.
Political Savvy	Identifies the internal and external politics that impact the work of the organization. Perceives organizational and political reality and acts accordingly.
Influencing / Negotiating	Persuades others. Builds consensus through give and take. Gains cooperation from others to obtain information and accomplish goals.

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Business Acumen & Enterprise-Wide Perspective

Business Acumen:

The ability to manage human, financial and information resources strategically.

Enterprise-wide Perspective:

The ability to keep a broad view on overall mission and the ultimate customer.

Areas of Competency

- Financial Management
- Human Capital Management
- Technology Management
- Computer Literacy
- National Security
  - Foundation
  - Environment
  - Strategy
- Joint Perspective
  - Mission Orientation

Factors to Consider in Your Application Response: Business Acumen

Financial Management	• Understands the organization's financial processes. • Prepares, justifies, and administers the program budget. • Oversees procurement and contracting to achieve desired results. • Monitors expenditures and uses cost-benefit thinking to set
Human Capital Management	• Builds and manages the workforce based on organizational goals, budget considerations, and staffing needs. • Ensures that employees are appropriately recruited, selected, appraised, and rewarded. • Takes action to address performance problems. • Manages a multi-sector workforce and a variety of work situations.
Technology Management	• Keeps up-to-date on technological developments. • Makes effective use of technology to achieve results. • Ensures access to and security of technology systems.

Factors to Consider in Your Application Response: Enterprise-Wide Perspective

National Security	▤ Foundation ▤ Environment ▤ Strategy

Joint Perspective	▤ Mission Orientation ▤ DoD Mission and Culture ▤ DoD Corporate Perspective ▤ National Defense Integration ▤ Global Perspective

Application - Section 1.6
Cross Functional Competencies

Section 1.6.: Cross-Functional Competencies

This section focuses on your broader experience, not limited to the career field for which you are applying for KLP Qualification. (Section 2 will focus directly on your specific career field.) Highlight your experience in and with other acquisition career fields addressing some or all of the competencies defined in the *Instructions for Completing a Key Leadership Position Qualification Board Application.*

Enter your work experience/evidence of requirement fulfillment in the box immediately below each requirement. Responses are limited to 1000 characters or fewer per requirement.

Describe your experience in Program Execution.

Provide specific examples of your relevant experience

Describe your experience in Technical Management.

Provide specific examples of your relevant experience

Describe your experience in Business Management.

Provide specific examples of your relevant experience

Program Execution: Discuss your program experience covering different aspects of the acquisition process (e.g. integration, engineering, T&E, quality assurance, etc.)

Technical Management: Organization, governance, and effective application of current technology, acquisition practices, design, and security considerations

Business Management: Program oversight, achieving best value

Application Section 2.0

Section 2.0 CDT Specific Requirements

Application - Sections 2.1 & 2.2
Specific Experience Requirements & Background

Section 2.1.: Chief Developmental Tester Specific Experience Requirements

Mark the box to indicate that you meet the following requirement
☐ I have held Level III T&E Certification for at least 2 years.

Section 2.2: General Background Summary

Provide a brief summary of your background and your reason(s) for applying to the KLP Joint Qualification Board. *Response is limited to 800 characters.*

Chief Developmental Tester Specific Experience Requirements

- Section 2 focuses on T&E and technical experience in the full acquisition life cycle support in T&E: Planning, Preparation, Execution, Analysis, Evaluation, and Reporting.

- Focus specifically on the critical functional knowledge, skills, abilities and experiences needed for a specific functional leadership role.

Application - Sections 2.3
CDT Technical Management

Section 2.3.: Chief Developmental Tester Technical Management

Enter your work experience/evidence of requirement fulfillment in the box immediately below each requirement. *Responses are limited to 500 characters or fewer per requirement.*

Describe your experience in **T&E Planning**.

For each section, provide specific examples of your relevant experience

Describe your experience in **Coordination of T&E Activities and Events and Test Infrastructure**.

Describe your experience in **T&E Risk Identification and Management**.

Describe your experience in **Scientific Test and Analysis Techniques**.

See the DoD T&E Workforce Competency Model in the Appendix

CDT Technical Management Skills
- T&E Planning
- Coordination of T&E Activities and Events and Test Infrastructure
- T&E Risk Identification and Management
- Scientific Test and Analysis Techniques

Application - Sections 2.4

CDT Program Execution

Section 2.4.: Chief Developmental Tester Program Execution

Enter your work experience/evidence of requirement fulfillment in the box immediately below each requirement. Responses are limited to 500 characters or fewer per requirement.

Describe your experience with **Test Readiness**.

Describe your experience in **Test Control Management**.

> ***For each section, provide specific examples of your relevant experience***

Describe your experience in **Data Management**.

Describe your experience in **Data Verification and Validation**.

Describe your experience in **Determination of Test Adequacy**.

Describe your experience in **Validation of Test Results**.

Describe your experience in **Evaluation and Conclusions**.

Describe your experience in **Participation in Technical Reviews**.

Describe your experience with **Key T&E Documentation including development and execution of a TEMP**.

See the DoD T&E Workforce Competency Model in Appendix

CDT Program Execution

- Describe your superior knowledge and work experience in the T&E competencies of:
  - Test Readiness
  - Test Control Management
  - Data Management
  - Data Verification and Validation
  - Determination of Test Adequacy
  - Validation of Test Results
  - Evaluation and Conclusions
  - Participation in Technical Reviews
  - Key T&E Documentation

Application - Sections 2.5

CDT Business Management

Section 2.5.: Chief Developmental Tester Business Management

Enter your work experience/evidence of requirement fulfillment in the box immediately below the requirement.
Responses are limited to 500 characters or fewer per requirement.

Describe your experience in **T&E Cost Estimating and Management**.

Provide specific examples of your relevant experience

Execution And Business Management Skills

- Describe your superior knowledge in the T&E competencies associated with:
  - T&E Cost Estimating and Management

See the DoD T&E Workforce Competency Model in Appendix

Application

**Section 3.0
Application
Certification and
Endorsement**

Applicant Certification, Supervisor Concurrence & SES/Flag Endorsement

Applicant Certification

I certify that I have accurately represented my experience and knowledge in this application for consideration in the Key Leadership Position qualification pool.		

Supervisor Concurrence

I concur that the applicant has represented their technical competence in the experience and knowledge stated in this application. I have supervised this applicant for _____ years and _____ months.		

Senior Executive Service/Flag Officer/General Officer Endorsement

I endorse the applicant as a candidate for the Key Leadership Position Qualification Board.		
Name	**Title**	**Date**
Endorser E-Mail	**Endorser Phone**	

Application Certification and Endorsement
- The application requires three signatures: Candidate, Supervisor, and SES/Flag
- Signatures may be captured one of two ways: digital signatures (preferred) or printed with physical signatures and forwarded as scanned .pdf

You Are in the Pool… Now What?

- **Your responsibilities**
  - Communication
  - Individual Development Plan (IDP)
  - Seek opportunities

- **Staying qualified and growing professionally**
  - Continuing education
  - Maintaining currency through Continuous Learning (i.e., 80 hours every two years)
  - Seek out leadership and mentoring opportunities

- **Consideration for future positions**
  - Leverage network
  - Maintain contact with SYSCOM T&E Leads and T&E community

Incumbent CDT… Now What?

- **Your responsibilities as an incumbent CDT**
  - Needed T&E KLP qualifications by 30 June 2015, or as soon as possible after that, if any gaps
  - IDP for CL and needed training
  - No Q-Board process required for incumbent CDTs

- **Staying qualified and proficient**
  - Continuing education
  - Maintaining currency through Continuous Learning (i.e., 80 hours every two years)
  - Seek out leadership and mentoring opportunities

- **Consideration for future positions**
  - Leverage network
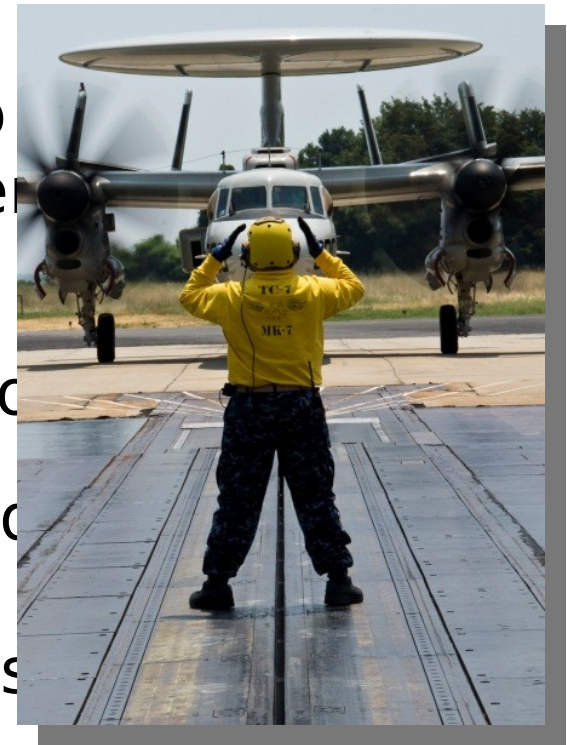 - Maintain contact with SYSCOM T&E Leads and T&E community

Closing Thoughts on KLP Q-Boards

- Intended to be of benefit and value-add for personnel in DOD/DON

- Provides standardized data to hiring manager

- Supports career growth and positive impact fo

- Well qualified and experienced candidates need to process

There are no negative consequences to apply for T&E KLP certification and/or failing to receive it

Additional Questions?

- Contact your Command/Activity T&E Lead or Office
- Also contact, if needed:
  - DON T&E Office, DASN (RDT&E) at 571-256-7889
  - DON DACM at dacm.desk.fct@navy.mil

Appendix

DOD T&E Workforce Competency Model

DOD T&E Workforce Competency Model (June 7, 2013)

Units of Competence	Competencies	Competency Elements
Planning	**Competency 1.** Risk Identification	**Element 1.** Identify T&E risk factors (e.g., lack of available time, money, test articles/platforms, new technology, test expertise, external SMEs, test facilities, product maturity that includes hardware/ software) based upon likelihood and consequence of occurrence to test strategy/approach and impact to the overall program plan and schedule along with mitigation recommendations.
		Element 2. Develop risk mitigation for T&E risk factors in accordance with the processes and procedures found in the Department of Defense Risk Management Guide to cover system risk elements throughout the test program.
		Element 3. Support Program Management Office's development of a risk management plan with T&E relevant risks and mitigation plans that enable a balanced plan for a program.
	Competency 2. Capabilities Assessment	**Element 4.** Translate requirements documents (e.g. Technology Development Strategy, Initial Capabilities Document, Capability Development Document, Capability Production Document, Program Protection Plan, Information Assurance Strategy, Information Support Plan, System Threat Assessment Report, Environmental, Safety and Occupational Health and concept of employment/operation) to identify evaluation criteria to support T&E planning efforts.
		Element 5. Assess whether the capability requirements are well defined so as to measure in test and are relevant to the operational mission.
		Element 6. Determine data requirements to assess evaluation criteria for assessing the system performance requirements, (e.g. identify Critical Technical Parameters, software maturity levels, Measures of Effectiveness, Measures of Suitability) to support evaluation of Critical Operational Issues, Key Performance Parameters, and Key System Attributes.
		Element 7. Determine necessary T&E infrastructure requirements (people/ knowledge, cybersecurity teams, funding, investments, budgets, T&E processes, facilities/ranges, cyber ranges, instrumentation and associated support, Software Systems Integration Labs, Modeling & Simulation) and identify shortfalls that will require investments to meet T&E infrastructure sufficiency.
	Competency 3. Program T&E Strategy Development	**Element 8.** Incorporate all policies, practices and procedures with the technical requirements of a program to develop and document a T&E strategy that supports the program's acquisition strategy. Utilize the full spectrum of the integrated testing process in the T&E strategy. Identify how the following components fit together during systems development: CT, DT, OT, and LFT. Identify where environmental, interoperability, cybersecurity, and mission-level testing should fit into system development. Determine the appropriate criteria for evaluating OT parameters (Effectiveness, Suitability, and Survivability) and LFT&E parameters (Lethality and Vulnerability).

Units of Competence	Competencies	Competency Elements
		Element 9. Develop and document the test and evaluation strategy that integrates policy, program requirements, cost and resource estimates, evaluation framework and the T&E schedule to accomplish program goals. Use appropriate contracting strategies to maximize the efficient use of human capital and other resources.
		Element 10. Identify all organizations and activities that have roles and responsibilities in providing for or overseeing the T&E strategy that supports a program's acquisition life cycle or a system-of-systems' acquisition life cycle.
		Element 11. Identify and organize the T&E management forum (e.g., T&E Working-level Integrated Product Team, Integrated Test Team, Combined Test Team) necessary to address all the T&E issues and documentation to support the test and evaluation strategy, approach, and the overall program plan.
		Element 12. Translate the T&E strategy into the appropriate test document (e.g., Test and Evaluation Master Plan (TEMP), Developmental Test Plans, and Operational Test Plans) including identification of all the required resources to ensure the strategy is executable and supports the systems engineering plan and overall Acquisition Strategy.
	Competency 4. Test Cost Estimating	**Element 13.** Provide financial cost estimates for T&E support to ensure T&E resources are available during development and production of the system lifecycle.
Preparation	**Competency 5.** Coordination of T&E Activities and Events	**Element 14.** Interact with all organization/activities that require information/ activity exchange to successfully complete the test planning as enumerated in the T&E strategy contained in the Test and Evaluation Master Plan.
		Element 15. Continually coordinate and monitor availability of required test and/or evaluation resources to identify any potential resource problem/issue (e.g., troop deployment, range closure, required test configurations may slip, environmental certifications, requisite authorities to test/operate, blue team / red team availability) to ensure effective completion of test events. Determine how to protect the integrity of test data.
		Element 16. Execute tasking orders and funding streams to commit resources as requested, when and where required to complete T&E activities/event.
	Competency 6. Test Readiness	**Element 17.** Verify readiness of resources (e.g., facilities, trained operators, maintainers, externally acquired test teams (e.g. red, blue, etc.), and testers, properly configured test products/software/systems/platforms and instrumentation) for T&E program execution.
		Element 18. Ensure all required resources are deployed to the test site(s) as required and in sufficient time to provide for pre-test rehearsal(s), communications, and instrumentation checks.
		Element 19. Comply with and implement policies and procedures (e.g., safety, security, environmental) required to successfully conduct test activity/event. Investigate specific policies, procedures, and operational constraints for applicable test ranges to ensure compatibility during test operations.

DOD T&E Workforce Competency Model, cont.

Units of Competence	Competencies	Competency Elements
(Yellow)		**Element 20.** Assess all T&E related factors (resources and product maturity including hardware/software) to determine system/test article readiness (e.g. Developmental Test Readiness Reviews, DT&E Assessments, and Operational Test Readiness Reviews) before the starting the test. Ensure adequate personnel are assigned to allow continual coverage for overlapping test events.
		Element 21. Plan, conduct, and report on Test Readiness Reviews.
Test Execution	**Competency 7.** Risk Management	**Element 22.** Manage test execution/risk mitigation factors (e.g. safety, schedule, resources, fault isolation and program priority) by adapting to real-time changes/challenges to advise Test Director in order to optimize test opportunity and coverage of key parameters/factors/conditions that have significant effect on operational performance.
	Competency 8. Test Control Management	**Element 23.** Confirm data collection tools are valid, operators and maintainers are trained, Modeling and Simulation/Live Virtual Constructive (LVC) hardware and software tools are properly integrated, and system under test is configured as required to execute the test events/activities and collect required data.
		Element 24. Confirm and monitor security and safety compliance (such as people and item/system under test) and environmental requirements constraints to protect resources and comply with established policies.
		Element 25. Develop, validate, rehearse, and execute tests in an organized fashion to facilitate identification of completed data suitable in form and format for analysis and evaluation.
		Element 26. Control the test schedule to complete scenarios and scripts within boundaries of test plan and to optimize collection of data to support evaluation objectives.
	Competency 9. Data Management	**Element 27.** Verify all required and expected Raw Test Data (i.e. forms, electronic tapes, sensors, etc.) are secure, collected, documented and archived along with descriptions of data to assure completeness of data collected.
		Element 28. Ensure validity of collected test data to meet test objectives in support of planned analysis and evaluation.
		Element 29. Distribute data per the data management plan for analysis of test results in support of the evaluation.
Analysis	**Competency 10.** Data Verification and Validation	**Element 30.** Translate outputs from test instrumentation systems, data acquisition system methods and formats, capabilities and operation to verify and validate test data set.
		Element 31. Identify gaps and variances in raw test data to determine data voids or outliers that may degrade analysis and evaluation.
	Competency 11. Data Reduction and Assimilation	**Element 32.** Reduce, translate and analyze raw test data into organized and meaningful data products to support planned analysis, evaluation, and reporting.
		Element 33. Conduct data scoring to refine demonstrated test results (i.e. fly out, models, Reliability, Availability and Maintainability scoring conferences) to establish a complete data set of system, to include software performance.
		Element 34. Align data to support specific test objectives in support of the planned analysis in support of the overall evaluation.

Units of Competence	Competencies	Competency Elements
Evaluation	**Competency 12.** Determination of Test Adequacy	**Element 35.** Confirm that the tests conducted support the stated test objectives (i.e. does the product satisfy system requirements) to ensure adequacy of the planned analysis and evaluation. Determine appropriate analysis and evaluation techniques to be incorporated in a system evaluation or a system-of-systems' evaluation.
		Element 36. Confirm that modeling and simulation met test objectives so as to augment test data and ensure adequacy of evaluation. Identify how accredited modeling and simulation (including the V&V process) should be used to supplement live test data.
	Competency 13. Validation of Test Results	**Element 37.** Determine if the collected data are sufficient to accurately and completely support established measurability metrics (e.g. effectiveness, suitability, survivability, etc.).
		Element 38. Determine if the data collected via modeling and simulation tools are sufficient to adequately supplement data collected during live T&E to facilitate a credible evaluation of the system's (or system-of-systems') realistic survivability and lethality under combat conditions.
	Competency 14. Evaluative Conclusions	**Element 39.** Confirm that the collected test data can sufficiently and accurately support the evaluation framework in the approved Test & Evaluation Master Plan.
		Element 40. Relate test results and evaluation conclusions to performance specification and performance results to report on operational significance.
		Element 41. Assess how hardware/software components are brought together to function properly as required in capability documents and what its performance brings to the larger System of Systems designed to achieve required capability.
Reporting	**Competency 15.** Technical Reviews	**Element 42.** Determine and provide T&E input to all technical and programmatic reviews to support acquisition decision-making.
	Competency 16. Lessons Learned	**Element 43.** Assess and document lessons learned on conduct of test data collection, analysis, and evaluation processes to ensure constant improvement of methods and processes.
		Element 44. Apply and/or adapt previous lessons learned from similar test activities/events.
	Competency 17. Documentation	**Element 45.** Provide the required programmatic T&E reports and/or presentation (such as quick look analysis, test reports, analysis reports and evaluation reports) to capture test background, methodology, limitations, results, evaluation, and recommendations to support decision making.
		Element 46. Archive the data throughout the T&E planning, preparation T&E execution, analysis and evaluation phases to support future T&E efforts.
Professional	**Competency 18.** Customer Service	**Element 47.** Anticipate and support the needs of both internal and external customers of the acquisition community.
		Element 48. Deliver high quality T&E products/services and commit to continuous improvement.
	Competency 19. External Awareness	**Element 49.** Maintain currency on local, national and international T&E policies and trends that might affect the Department of Defense T&E acquisition community and associated stakeholders.

DOD T&E Workforce Competency Model, cont.

Units of Competence	Competencies	Competency Elements
		Element 50. Assess T&E impact on the external environment (e.g. social, political, economic) and end user.
		Element 51. Remain actively involved and partner with other elements in the acquisition process (e.g., systems engineering, information assurance).
	Competency 20. Flexibility	**Element 52.** Respond to changes and new information and rapidly adapt to changing circumstances impacting the test and evaluation strategy, approach, and overall plan.
	Competency 21. Communication	**Element 53.** Listen effectively and clarify information as needed.
		Element 54. Make clear and convincing oral presentations of technical data, analysis, and evaluation for the intended audience.
		Element 55. Write in a clear, concise, organized, and convincing manner for the intended audience.
	Competency 22. Technical Credibility	**Element 56.** Apply, and/or convey T&E principles, procedures, requirements, regulations, and policies related to specialized technical competencies and or needed by program decision-makers.
		Element 57. Pursue self-development to advance technical and management skill sets and prepare for future advancement and changing technologies.
		Element 58. Maintain currency of technical knowledge, skills, and certifications.
	Competency 23. Critical Thinking	**Element 59.** Independently and objectively anticipate, identify, analyze challenges/problems, weighing relevance and accuracy of information to affect solutions.
		Element 60. Generate and evaluate alternative T&E strategies and solutions.
	Competency 24. Professional Ethics	**Element 61.** Provide unbiased T&E results, analysis, and evaluation.
		Element 62. Exhibit personal conduct in accordance with Department of Defense ethical standards.
	Competency 25. Leadership and Management	**Element 63.** Hold self and others accountable for measurable, high quality, timely, and cost effective data, and unbiased test and evaluation results.
		Element 64. Determine objectives, sets priorities, delegates work to the right person/group, and monitors progress.
		Element 65. Accept responsibility for his/her team mistakes and shortfalls.
		Element 66. Make well-informed, effective and timely decisions, even when data are limited or solutions produce negative consequences.
		Element 67. Anticipate and articulate implications of decisions, test, and evaluation results.
		Element 68. Inspire and foster team building and partnering.
		Element 69. Provide the vision and strategic thinking and planning necessary to ensure all the necessary resources are leveraged to the extent possible and available when needed.